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(19) (CA) APPLICATION FOR CANADIAN PATENT (12)

(54) Method of Transferring Files from One Computer to Another

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Abstract of the Disclosure

This invention relates generally to a method for transmitting electronic information from a first computer to a second computer. The information is packaged in such a 5 way that it can be unpacked at the second computer in a plurality of formats so as to be useable by applications available to the second computer. Optionally the packaging/unpacking can be performed to allow for individual documents to be unpacked in groups or individually based on predefined preferences.

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Method of Transferring Files From One Computer To Another

Field of the Invention

- 5 This invention relates generally to a method for transmitting electronic information to a receiving computer, in a format useable by an application available to the receiving computer.

Background of the Invention

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Before computers shared information and of course before the advent of electronic mail, information was generally shared directly. For example if a message was written by hand or typed, it would be manually delivered to its destination. Pictures were likewise printed and then manually delivered. Other information such as audio or video 15 was recorded on magnetic tape in a standardized format, then delivered to an intended recipient where it could then be played back. Information transferred in this manner is often fixed and difficult to change at the receiving end.

Through the use of computers and more particularly computer networks, information 20 can be sent as electronic mail messages or attachments thereto. Such electronic mail arrives at its destination as a message or as an attached file. Attached files may contain information in the form of, text, graphics, sound, video, and tables. Often these files are generated by software programs and are stored in proprietary formats or as exported text information.

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With compatible software programs or applications, a recipient can amend, edit, or select portions of the information received for further use. The information, stored as an electronic file, can, for instance, be filed, copied, incorporated into a larger work, forwarded to a colleague, searched for specific references, printed, viewed, and/or 30 erased. Often such electronic mail is more expedient and cost effective than conventional delivery methods.

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Unfortunately, each in a group of individuals in collaboration on a project may require many "compatible software applications" - one for each form of information received.

For example, a document, such as the chapter of a novel, may simply be in an ASCII

- 5 text format or, alternatively, may be in a format particular to a word processing application in which the document was created. The recipient requires a software application capable of accepting information in the format of the document in order to open and display all of the attributes of that document.

- 10 In addressing this problem, many available software applications incorporate utilities often known as "filters" that are capable of importing files created in a variety of formats; however, these utilities generally require information in advance regarding the format of the received information before the information can be imported and converted. In some instances, these data conversion utilities lose some data and 15 formatting information in the importation/conversion process. For example, if a document containing layout information in the form of graphics is imported into a word-processing document, the presentation may be altered.

- 20 With the increased use of networking, users more often encounter problems with compatibility between software packages, file formats, and hardware platforms. These problems are sometimes obviated by standardizing an entire organization on specific software packages. Further, many organizations maintain software libraries to enable recipients of information in an inaccessible format (for the standardized software applications) to access it with a compatible software application from the library.

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- Thus a user, upon receiving a file must ensure that a compatible software application is available for accessing and/or manipulating the information contained therein. Further, users are often required to know in advance, the format of the received file in order to identify a compatible software application or a compatible utility for importing the 30 information. When such software is not available, the user must contact the sender of

the data to obtain information concerning the format of the data or arrange to have it resent in a different format compatible with software that is available.

- Recently, it has become apparent that providing an improved method of sending
- 5 information in the form of files across a network would be advantageous.

Object of the Invention

- It is an object of the present invention to provide an improved method of transferring
- 10 information between computers.

Summary of the Invention

- In accordance with the invention there is provided a method of transferring information
- 15 from a first computer to a second computer containing stored software applications,
- the method comprising the steps of
- a) providing the first computer with a first file containing information stored in a first
- format and containing one or more documents;
- b) the first computer providing a second file in a second format, the second file
- 20 containing an executable program for storing the one or more documents in the first
- file on the second computer;
- c) transferring the first file and the second file from the first computer to the second
- computer;
- d) executing the executable program on the second computer to determine at least a
- 25 suitable software application available to the second computer and compatible with one
- or more documents; and
- e) converting one or more documents to one or more files in formats compatible with
- the at least a suitable software application capable of processing the one or more
- documents.

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In accordance with the invention there is further provided a method of transferring files from a first computer to a second computer containing stored software applications, the method comprising the steps of

- a) providing the first computer with a first file in a first format and containing information;
- 5 b) the first computer providing a second file in a second format including an executable program for storing the information in the first file;
- c) transferring the first file and the second file from the first computer to the second computer;
- 10 d) executing the executable program on the second computer to determine at least a suitable software application available to the second computer and compatible with one or more documents; and
- e) converting each of the one or more documents in the first format to at least another format compatible with the at least a suitable software application and storing the
- 15 documents in another format in one or more files.

In accordance with the invention there is further provided a method of transferring files from a first computer to a second computer having available software applications, the method comprising the steps of

- a) providing on the first computer a first file in a first format, the file containing one or more documents;
- b) providing on the first computer a second file in a second format, the file containing header information relating to the one or more documents and relating to software applications compatible with the one or more documents;
- 25 c) transferring the first file and the second file from the first computer to the second computer;
- d) said second computer determining the software applications available to the second computer and using the header information contained in the second file determining at least a software application compatible with a portion of the documents in the first file;
- 30 and

- e) converting the portion of the documents in the first format to one or more files in formats compatible with the at least a software application compatible with a portion of the documents.
- 5 In accordance with the invention there is further provided a method of transferring files from a first computer to a second computer having available software applications, the method comprising the steps of
- a) providing on the first computer a first file in a first format, the file containing one or more documents, header information relating to some of the documents and relating to
- 10 software applications compatible with some of the documents;
- b) transferring the first file from the first computer to the second computer;
- c) said second computer determining the software applications available to the second computer and using the header information contained in the transferred file determining at least a software application compatible with some of the documents; and
- 15 d) converting the some of the documents in the first format to at least another file in a format compatible with the at least a software application compatible with some of the documents.
- In accordance with the invention there is further provided method of transferring
- 20 information from a first computer to a second computer having available software applications, the method comprising the steps of
- a) providing, for the available software applications, information relating to compatible file types to the first computer;
- b) providing, on the first computer, information in a first format;
- 25 c) from the provided information relating to compatible file types, the first computer selecting at least a suitable file type for the information;
- d) the first computer converting the information in the first format to at least another format compatible with the at least a suitable file type; and
- e) the first computer transferring the information in the at least another format to the
- 30 second computer.

In accordance with the invention there is further provided a method of transferring files from a first computer to a second computer containing available software applications, the method comprising the steps of

- 5 a) providing a list of available software applications of the second computer to the first computer;
- 10 b) providing, on the first computer, a first file in a first format containing one or more documents, header information relating to one or more documents and compatible applications;
- 15 c) for at least a document the first computer selecting, from the provided list of stored software applications, at least a compatible software application;
- 20 d) the first computer converting the at least a document in at least an initial format to one or more files in formats accessible by the at least a compatible software application; and
- 25 e) the first computer transferring the one or more files to the second computer.

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Brief Description of the Drawings

Exemplary embodiments of the invention will now be described in conjunction with the following figures in which:

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Fig. 1 is a diagram of a graphical interface representative of a workspace window and its contents;

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Fig. 2 is a diagram of a graphical interface representative of the workspace window of Fig. 1 with a video document removed from the workspace;

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Fig. 3 is a schematic block diagram of a workspace and its constituent documents being transmitted from a first computer to a second computer with an available compatible software application wherein the documents are stored on the second computer in the same format as the document transmitted;

Fig. 4 is a schematic block diagram of a workspace and its constituent documents being transmitted from a first computer to a second computer without a single compatible software application available wherein the documents are stored on the second computer in a different format from the document transmitted;

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Fig. 5 is a schematic block diagram of a group of related documents being transmitted from a first computer to a second computer with a single available compatible software application for processing a plurality of the documents wherein the documents are stored on the second computer as a single workspace to be manipulated by the

10 available compatible software application;

Fig. 6 is a flow chart of a method according to this invention wherein an executable program is sent with documents in order to store the documents on the second computer;

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Fig. 7 is a flow chart of a method according to this invention wherein format related information is sent with documents in order to allow a program available to the second computer to store the documents on the second computer; and

20 Fig. 8 is a flow chart of a method according to this invention wherein format related information is received by the transmitting computer in order to permit the transmission of documents in a format compatible with software applications available to the second computer.

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Detailed Description of the Invention

Referring to Figure 1, a workspace 10 in the form of a graphical window or file is
30 opened for use. Static documents 1 in the form of text, pictures, spreadsheets, audio clips, and video clips, as well as active documents such as queries and their results can

- be placed into the workspace 10. For each document 1 there is an indication in the form of an icon as shown in Fig. 1. Each document 1 can be accessed from within the workspace 10. As shown in Fig. 2, a document 1a can be removed from the workspace 10 by removing the indication from the workspace 10. A workspace 10 can be stored 5 and retrieved for later use. A stored workspace, for example, may be a file in the form of a workspace header, document related information and format information. Alternatively, a workspace 10 may be stored as a directory or folder in the form of a workspace header in the form of file names, file related information, and optional format information and documents. Into a workspace 10, a user may, for instance, 10 place all accessible documents relating to a specific topic in order to better understand the topic or explain the topic to others. A workspace 10 may also contain historical information relating to the workspace 10 examples of which include past query results or change histories.
- 15 A first user, upon opening the workspace 10, can view any information contained therein and update any active documents. Thus, the first user can review the state of existing workspaces to glean information or to prepare for further work. The use of active documents within the workspace 10 allows a user, for instance, to remain current on an issue without manually rebuilding search criteria or statistical models.
- 20 Once the workspace 10 is complete and current work on it has ended, it is stored for later reference. In some instances, it may be desirable to send the workspace 10 to one or more users for reference, insights, or further updating.
- For example, a reporter tracking a current crisis may set up a workspace containing 25 background information in the form of articles, photographs, speeches, news clippings, video clippings, notes, and active documents which perform certain queries and compile the results statistically to indicate trends. Should the reporter be called away on another assignment, such a workspace could be opened by another reporter who could not only access the background information, but could also update any active 30 documents in order to view the trends as of the time of the update. Likewise, a government department could brief an elected official in a fashion that would keep the

official up to date at all times while the issue is ongoing or delayed without requiring daily updates from the department to the official.

In order to view or edit the workspace 10, a user must have an available software

- 5 application capable of manipulating the workspace 10. It is desirable to send the workspace in an "as is" form to other users who may have access to a software application capable of manipulating the workspace 10. Thus, the workspace 10 is transmitted as a file to a second computer. Among other ways, this may be accomplished by electronic file transfer or an attachment to electronic mail.

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When the second computer has a software application capable of manipulating the workspace 10, a standard file transfer allows a user of the second computer, upon receipt of the workspace 10, to view or edit the workspace 10. In the absence of such a software application, the method of the present invention allows the user of the 15 second computer to view or edit those parts of the workspace for which the second computer has available a software application.

Upon receiving the workspace 10 including at least a document, software applications available to the second computer are searched for compatible applications. Such a

- 20 search may be based on numerous approaches. A first approach, shown in Fig. 6, is to transfer, along with the workspace 10, an executable program or agent adapted to unpack the workspace 10 in a predetermined fashion. Such an executable program could, therefore, be designed with unique features based on the software application creating the workspace 10. This allows for much flexibility in file packing and 25 unpacking and further may allow a user of the software application creating the workspace 10 to set preferences particular to each workspace.

A compatible application is one which allows a user to work with information contained in a document and for which suitable formatting of the information is

- 30 available. For example, a word processing document, regardless of format, would likely result in all word processing applications and text editors being returned by a

search as compatible. The document will then be reformatted, when necessary, to be accessible by at least one of the returned word processing applications or text editors. This reformatting results in an accessible file formatted such that a specified application allows a user to work with information contained in the file. Thus a compatible

- 5 application may not be capable of allowing a user to work with the document while in the format in which it is transmitted. Compatible applications are suitable applications for processing documents, files, or information of a specified file type or format.

- Referring to Fig. 3 and Fig. 4, when a software application compatible with a
10 workspace's format is available to the second computer, the workspace 10 is stored without modification. If no such software application is found, the workspace 10 is stored in a different format or is divided into one or more documents; for one or more documents, software applications available to the second user are searched for compatible software applications. The search can be performed, for example, by
15 searching the available directories, searching a file list, searching a preference file, or executing an executable program designed to perform said search. When a compatible software application is found, the one or more documents are stored in a format compatible with the application. Additionally, documents for which no compatible software application is found also may be stored.

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- Turning now to Fig. 4, the second computer may receive documents grouped for partially compatible software applications. Thus a software application available to the second user and partially compatible with the workspace format but incapable of accessing video documents causes all video documents to be stored separately. The
25 compatible software application can access the complete workspace 10 as stored, and the video documents 11 are accessible to a different software application compatible with the video document format. Alternatively, the video documents can be stripped out of the stored workspace, for instance, to limit resource usage or to enhance compatibility.

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Turning to Fig. 5, the second computer may receive related documents separately. A software application available to the second user and compatible with a workspace format capable of manipulating the documents as a group and in a single file causes the documents to be stored together as a workspace 10. The compatible software

- 5 application can access the complete workspace 10 as stored. This renders the method of this invention bi-directional in communication between a first computer having an available software application compatible with a workspace format and a second computer having available software applications compatible with at least a portion of the documents in a workspace 10.

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Referring to Fig. 6, information consisting of at least one document is stored on a first computer and intended to be transferred to a second computer. The first computer adds an executable program to the information and transfers the information and the executable program to the second computer. The second computer, upon receipt of the

- 15 transferred information and program, executes the executable program. The program searches the second computer for available software applications compatible with the documents received. It may be that one software application (possibly the same software application that originally created the workspace) is compatible with all the documents as shown in Fig. 3. In such a case the workspace is stored "as is" or

- 20 together in an altered format. If no software application is present which can manipulate the information "as is" or in an altered format, the information is divided up into smaller groups of documents for which compatible software applications are sought. In this instance, at least some of the documents are divided into separate files as shown in Fig. 4. Using this method, a user of the second computer can access the

- 25 documents in the absence of the software application that originally created the information. Preferences can be provided by the software application that originally created the information, for example, to allow the second computer to store multiple copies of documents in formats compatible with each of a plurality of available software applications, to allow the second computer to store each document in an

- 30 individual file in formats compatible with at least an available software application, or

to allow the second computer to store groups of documents in formats compatible with at least an available software application.

For example, using the above method, when the first computer is provided with a

- 5 workspace containing a word processing document and a spreadsheet document in a proprietary format, the workspace and executable program may be sent to the second computer in a number of formats; for example as a self extracting file, as separate files, or as a single file containing the two files to be separated upon receipt. When the workspace and the executable program are sent as a self extracting file, the executable program is the executable part of the file and the workspace forms the file data.

The executable program is executed on the second computer - either as is or through an interpreter currently resident on said second computer. The executable program searches for the application that created the workspace. Upon locating the application,

- 15 the workspace is saved in its existing format. When the application is not found, the search continues for an alternative application capable of processing the workspace. These applications (in our example) could include Microsoft Works®, Ami Pro®, as well as others. When an alternative application is found, the workspace is saved in a format compatible with the alternative application. Any necessary format conversion to render the file accessible is performed by the executable program. As many applications are provided with filters, it is necessary to save the workspace in a format compatible with at least an available filter or application and not necessarily in the format of the alternative application.
- 20
- 25 When an alternative application is not found, the search continues for a word processing application capable of processing the word processing document alone. These word processing applications (in our example) could include Microsoft Word®, WordPerfect® as well as others. When a word processing application is found, the word processing document is saved in a format compatible with the word processing application. Any necessary format conversion to render the file accessible is performed by the executable program. As many applications are provided with filters, it is
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necessary to save the word processing document in a format compatible with at least an available filter or application and not necessarily in the format of the word processing application.

- 5 Then the executable program searches for a spreadsheet application. The spreadsheet applications (in our example) could include Microsoft Excel®, Lotus 123® as well as others. When a spreadsheet application is found, the spreadsheet document is saved in a format compatible with the spreadsheet application. Any necessary format conversion to render the file accessible is performed by the executable program. As many
- 10 applications are provided with filters, it is necessary to save the spreadsheet document in a format compatible with at least an available filter or application and not necessarily in the format of the spreadsheet application.

- A second approach, shown in Fig. 7, is to transmit along with the workspace 10 information indicative of document type and format. The second computer, upon receipt of the transmitted workspace 10 and information, searches available software applications to find a software application compatible with each of the documents received. It may be that one software application (possibly the same software application that originally created the workspace) is compatible with all the documents
- 20 as shown in Fig. 3 or, alternatively, it may be that at least some documents are stored as separate files as shown in Fig. 4. Using this method, a user of the second computer can access the documents in the absence of the software application which originally created the workspace 10. Preferences can be provided to allow the second computer to store multiple copies of documents in formats compatible with each of a plurality of
 - 25 available software applications. Further, each available software application, when installed and made available to the second computer, can install further information relating to software applications available to the second computer or relating to compatible file types for said software applications, as necessary, to match compatible file types using a search engine.

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For example, using the above method, when the first computer is provided with a workspace containing a word processing and a spreadsheet document in a proprietary format, the workspace and header information are sent to the second computer. The header information may be in the form of document size, type and format or further

- 5 information may be included. In our example the header will contain at least the types - word processing and spreadsheet, and the current formats of the documents. An application available to the second computer is executed and searches for the application that created the workspace. When the application is found, the workspace is saved in its existing format.

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When the application is not found, the search continues for an alternative application capable of processing all the document types contained in the workspace. These applications (in our example) could include Microsoft Works®, Ami Pro®, as well as others. When an alternative application is found, the workspace is saved in a format

- 15 compatible with the alternative application. Any necessary format conversion to render the file accessible is performed based on the header information by the application available to the second computer. As many applications are provided with filters, it is necessary to save the workspace in a format compatible with at least an available filter or application and not necessarily in the format of the alternative application.

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When an alternative application is not found, the search continues for a word processing application capable of processing the word processing document alone. These word processing applications (in our example) could include Microsoft Word®, WordPerfect® as well as others. When a word processing application is found, the

- 25 word processing document is saved in a format compatible with the word processing application. Any necessary format conversion to render the file accessible is performed based on the header information by the application available to the second computer. As many applications are provided with filters, it is necessary to save the word processing document in a format compatible with at least an available filter or
- 30 application and not necessarily in the format of the word processing application.

Then the executable program searches for a spreadsheet application. These spreadsheet applications (in our example) could include Microsoft Excel®, Lotus 123® as well as others. When a spreadsheet application is found, the spreadsheet document is saved in a format compatible with the spreadsheet application. Any necessary format conversion

- 5 to render the file accessible is performed based on the header information by the application available to the second computer. As many applications are provided with filters, it is necessary to save the spreadsheet document in a format compatible with at least an available filter or application and not necessarily in the format of the spreadsheet application.

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A third approach, shown in Fig. 8, is to provide the first computer with information relating to software applications available to the second computer in the form of a list of available software applications or compatible file types. Using such an approach, the first computer or possibly the software application which originally created the

- 15 information is provided with a search engine adapted to determine compatible software applications. The information relating to software applications available to the second computer is searched for software applications or file types which can be manipulated on the second computer. The documents are stored in a format (as a single file or as a plurality of files) as required by the search result. The documents, once stored in at
 - 20 least a format compatible with the software applications available to the second computer, are transmitted to the second computer where they are stored. Using this approach, user preferences can be provided from either or both computers. As such, using this approach, preference options outlined in the previous two approaches as well as others are available. Further, each available software application, when installed
 - 25 and made available to the second computer, can install further information relating to software applications available to the second computer or relating to compatible file types for said software applications, as necessary, to match compatible file types using this approach.
- 30 For example, using the above method, when the first computer is provided with a workspace containing a word processing and a spreadsheet document in a proprietary

format and a list of file types compatible with applications available to the second computer, the list is searched for the file type of the application that created the workspace. When the file type is found, the workspace is saved in its existing format.

- 5 When the file type is not found, the search continues for an alternative file type compatible with all the document types contained in the workspace. These file types (in our example) could include Microsoft Works®, Ami Pro®, as well as others. When an alternative file type is found, the workspace is saved in a format compatible with the file type. Any necessary format conversion to render the file compatible is performed

10 prior to the file being sent to the second computer.

When an alternative file type is not found, the search continues for a word processing file type. These word processing file types (in our example) could include Microsoft Word®, WordPerfect® as well as others. When a word processing file type is found, the word processing document is saved in a format compatible with the file type. Any necessary format conversion to render the file compatible is performed prior to the file being sent to the second computer.

- Then the executable program searches for a spreadsheet file type. These spreadsheet file types (in our example) could include Microsoft Excel®, Lotus 123® as well as others. When a spreadsheet file type is found, the spreadsheet document is saved in a format compatible with the spreadsheet file type. Any necessary format conversion to render the file compatible is performed prior to the file being sent to the second computer.

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The file or files are then sent to the second computer by a conventional method.

- Preferably, the workspace 10 or the documents 11 stored on the second computer are linked to at least some compatible software applications. In this fashion selecting the workspace 10 or stored files launches the compatible software application. Such

"linking" is known in the art and is an existing feature with several of the personal computer graphical user interfaces.

- 5 Also preferably, the documents 11 are stored in a preferred format of at least a compatible software application. This can be accomplished through the application of a "filter" for converting the format of a document or through a separate executable program. Any information necessary for such a conversion would necessarily be included in the transmitted information.
 - 10 In an embodiment, the information contained in the workspace 10 which is indicative of the format of the workspace and of the documents is an agent which acts as data for a known recipient software application or which executes on a recipient computer. In such a fashion, proprietary data formats can be transformed into formats compatible with many software applications. Also, the use of agents allows the user of a software application which creates a workspace to transmit information along with preferred groupings and unpacking methods.
 - 15

Numerous other embodiments may be envisaged without departing from the spirit and scope of the invention.

Claims

1. A method of transferring information from a first computer to a second computer containing stored software applications, the method comprising the steps of
 - 5 a) providing the first computer with a first file containing information stored in a first format and containing one or more documents;
 - b) the first computer providing a second file in a second format, the second file containing an executable program for storing the one or more documents in the first file on the second computer;
 - 10 c) transferring the first file and the second file from the first computer to the second computer;
 - d) executing the executable program on the second computer to determine at least a suitable software application available to the second computer and compatible with one or more documents; and
 - 15 e) converting one or more documents to one or more files in formats compatible with the at least a suitable software application capable of processing the one or more documents.
2. The method of claim 1 wherein the one or more documents comprise a plurality of
 - 20 documents.
3. A method of transferring files from a first computer to a second computer containing stored software applications, the method comprising the steps of
 - 25 a) providing the first computer with a first file in a first format and containing information;
 - b) the first computer providing a second file in a second format including an executable program for storing the information in the first file;
 - c) transferring the first file and the second file from the first computer to the second computer;
 - 30 d) executing the executable program on the second computer to determine at least a suitable software application available to the second computer and compatible with one or more documents; and

e) converting each of the one or more documents in the first format to at least another format compatible with the at least a suitable software application and storing the documents in another format in one or more files.

5 4. The method of claim 1 wherein the first file further comprises header information indicative of one or more documents and compatible applications.

5. The method of claim 1 wherein the executable program is for storing one or more documents from the first file in dependence upon predetermined user criteria.

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6. A method of transferring files from a first computer to a second computer having available software applications, the method comprising the steps of
a) providing on the first computer a first file in a first format, the file containing one or more documents;

15 b) providing on the first computer a second file in a second format, the file containing header information relating to the one or more documents and relating to software applications compatible with the one or more documents;

c) transferring the first file and the second file from the first computer to the second computer;

20 d) said second computer determining the software applications available to the second computer and using the header information contained in the second file determining at least a software application compatible with a portion of the documents in the first file; and

25 e) converting the portion of the documents in the first format to one or more files in formats compatible with the at least a software application compatible with a portion of the documents.

7. The method of claim 6 wherein the one or more documents is a plurality of documents.

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8. The method of claim 6 wherein the first and second files are transferred to the second computer as a single file.
9. A method of transferring files from a first computer to a second computer having
5 available software applications, the method comprising the steps of
a) providing on the first computer a first file in a first format, the file containing one or more documents, header information relating to some of the documents and relating to software applications compatible with some of the documents;
b) transferring the first file from the first computer to the second computer;
10 c) said second computer determining the software applications available to the second computer and using the header information contained in the transferred file determining at least a software application compatible with some of the documents; and
d) converting the some of the documents in the first format to at least another file in a format compatible with the at least a software application compatible with some of the
15 documents.
10. The method of claim 9 wherein the one or more documents is a plurality of documents.
- 20 11. A method of transferring information from a first computer to a second computer having available software applications, the method comprising the steps of
a) providing, for the available software applications, information relating to compatible file types to the first computer;
b) providing, on the first computer, information in a first format;
25 c) from the provided information relating to compatible file types, the first computer selecting at least a suitable file type for the information;
d) the first computer converting the information in the first format to at least another format compatible with the at least a suitable file type; and
e) the first computer transferring the information in the at least another format to the
30 second computer.

12. The method of claim 11 wherein the information is a file.
 13. The method of claim 12 wherein the file contains one or more documents and header information indicative of the documents and suitable file types for said documents.
 14. The method of claim 12 wherein the file contains one or more documents and further contains header information relating to one or more documents and suitable applications for processing said documents.
- 10
15. The method of claim 11 wherein the information relating to compatible file types is a list of the available software applications.
 16. A method of transferring files from a first computer to a second computer containing available software applications, the method comprising the steps of
 - a) providing a list of available software applications of the second computer to the first computer;
 - b) providing, on the first computer, a first file in a first format containing one or more documents, header information relating to one or more documents and compatible applications;
 - c) for at least a document the first computer selecting, from the provided list of stored software applications, at least a compatible software application;
 - d) the first computer converting the at least a document in at least an initial format to one or more files in formats accessible by the at least a compatible software application; and
 - e) the first computer transferring the one or more files to the second computer.

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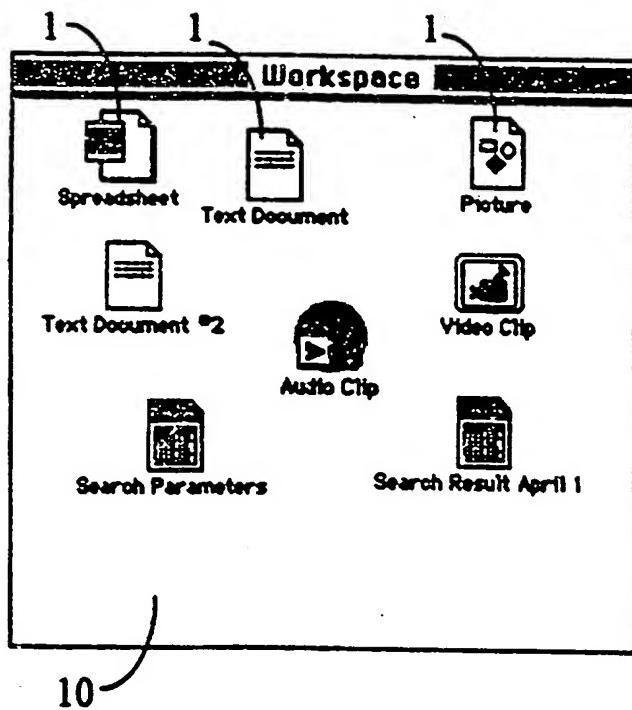
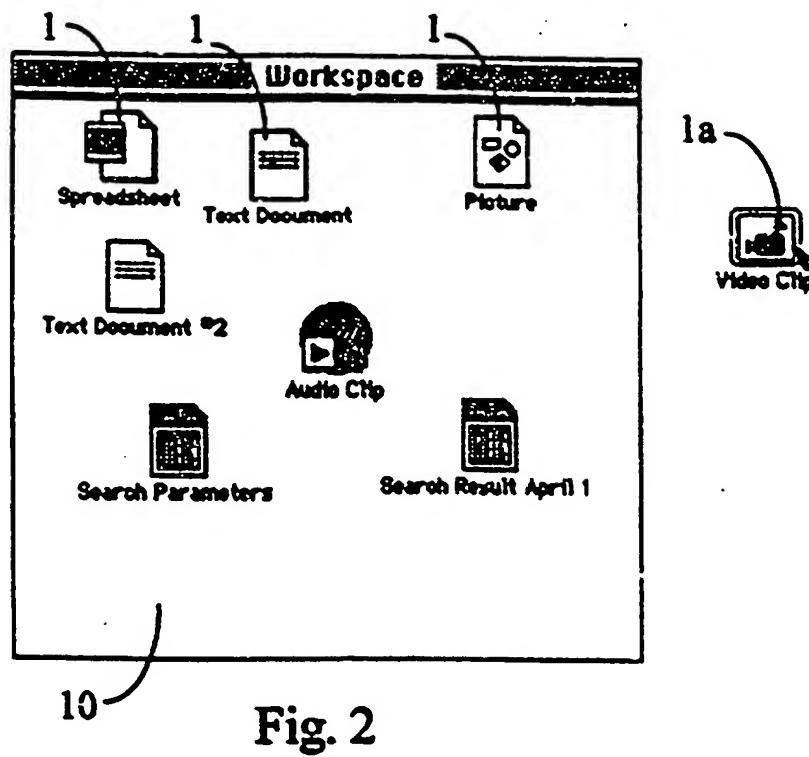
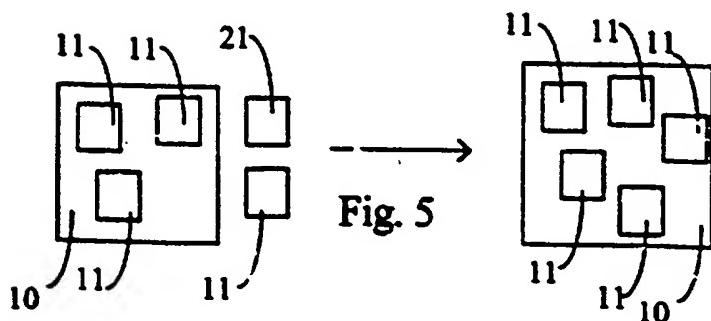
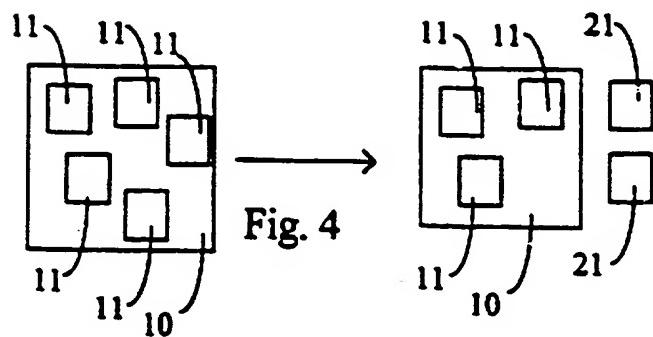
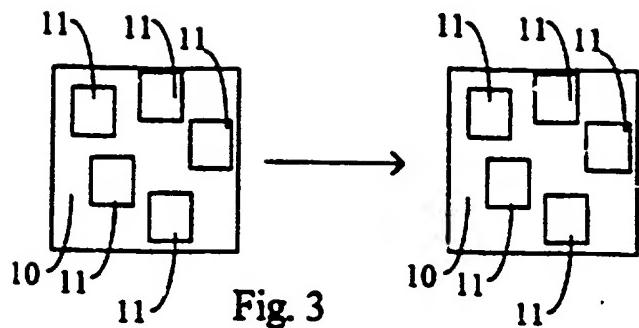


Fig. 1

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Fig. 6

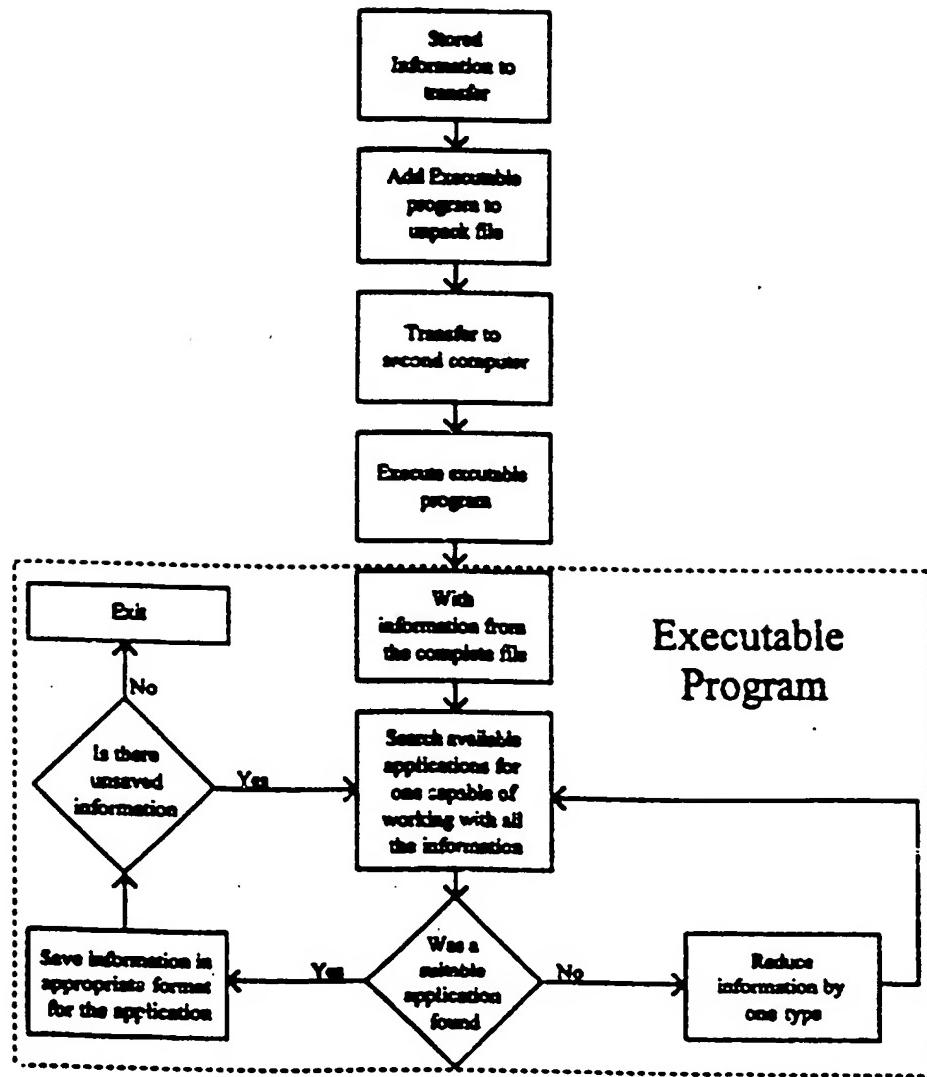
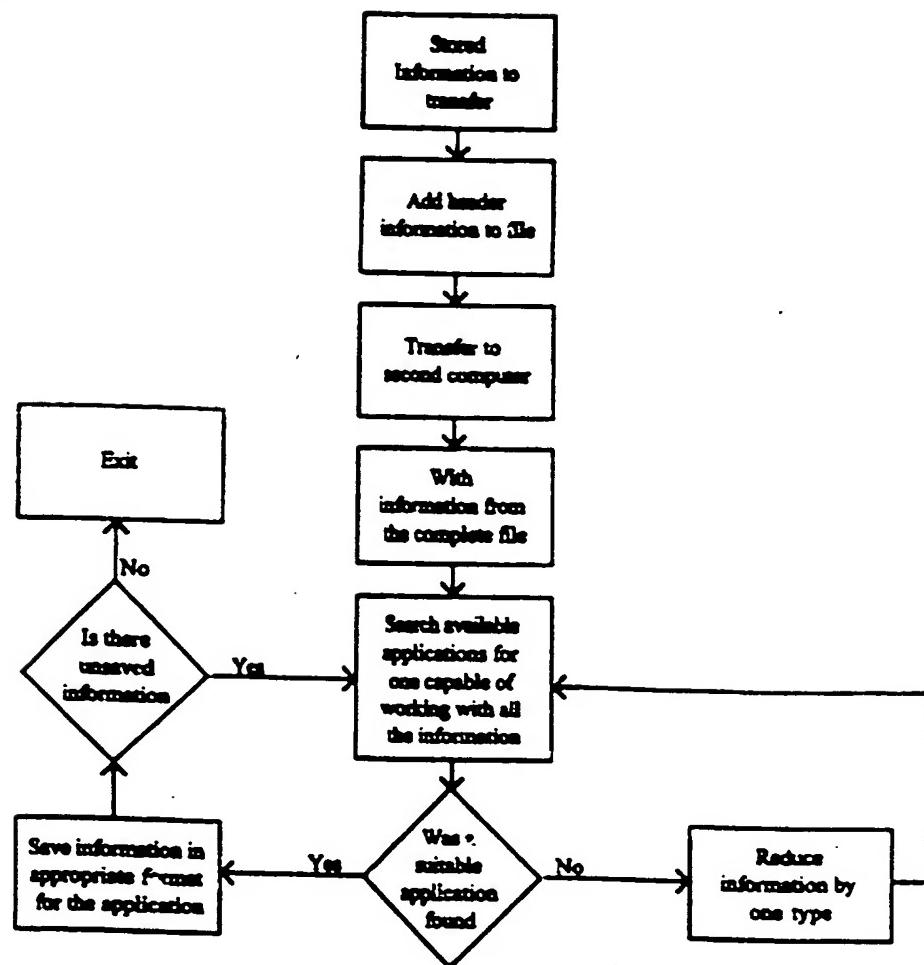
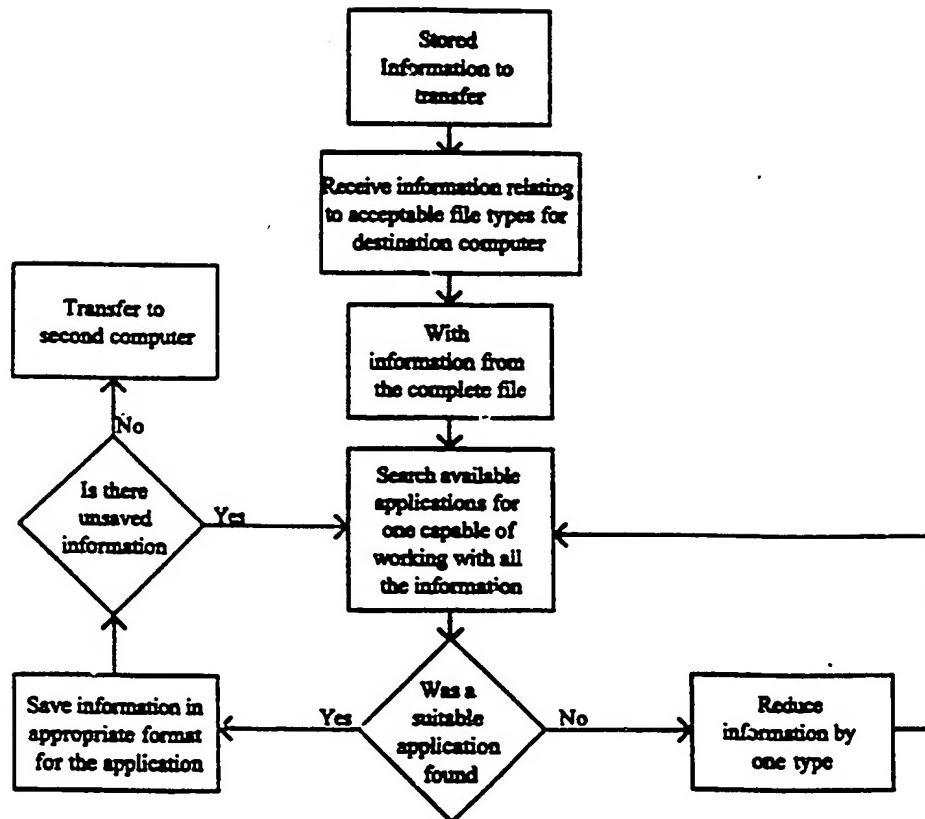


Fig. 7



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Fig. 8



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